ISTRUZIONI PER L'INSTALLAZIONE E L'USO INSTRUCTION BOOKLET

ZANUSSI

# LAVATRICE
# WASHING MACHINE

## FL 402 C
## FL 412
## FL 552

124975470

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# TECHNICAL SPECIFICATIONS

| | | |
|---|---|---|
| DIMENSIONS | Height | 85 cm |
| | Width | 60 cm |
| | Depth | 52 cm |
| POWER SUPPLY VOLTAGE/FREQUENCY | | 220-230V / 50 Hz |
| TOTAL POWER ABSORBED | | 2250 W (10A) |
| WATER PRESSURE | Minimum | 5 N/cm² |
| | Maximum | 80 N/cm² |
| MAXIMUM RECOMMENDED LOAD | Cotton, linen | 5 kg |
| | Synthetics, delicate fabrics | 2 kg |
| | Wool | 1 kg |
| SPIN SPEED | Maximum | 400 rpm |

CE This appliance complies with the following E.E.C. Directives:
- 73/23 EEC of 19.2.73 (Low Voltage Directive) and subsequent modifications;
- 89/336 EEC of 3.5.89 (Electromagnetic Compatibility Directive) and subsequent modifications.

# IMPORTANT INFORMATION



**YOU MUST READ THE WHOLE OF THIS INSTRUCTION BOOK BEFORE YOU USE THE APPLIANCE. FOLLOW THE ADVICE CAREFULLY.**

**KEEP THE BOOK FOR FUTURE REFERENCE. IF YOU SELL OR GIVE AWAY THE APPLIANCE, MAKE SURE THAT THE BOOK IS PASSED TO THE NEW OWNER.**

## WARNINGS

- **The following warnings are provided in the interest of overall safety. You must read them before the appliance is installed or used.**

## INSTALLATION

- This appliance is heavy. Care should be taken when moving it.
- All packaging and transit bolts must be removed before the appliance is used. Serious damage may occur if this is not done.
- Any plumbing work required to install this appliance should be carried out by a qualified plumber or competent person.
- Any electrical work required to install this appliance should be carried out by a qualified electrician or competent person.
- Make sure that the appliance does not stand on its electrical supply cable.
- If the machine is situated on a carpeted floor, please adjust the feet to ensure that air can circulate freely.

## USE

- Always unplug the appliance and turn off the water after use.
- Do not overload the appliance.
- Only wash fabrics which are designed to be machine washed. If in doubt, follow the instructions you find on the label of the item itself.
- Make sure that all pockets are empty. Hard, sharp objects such as coins, safety pins, nails, screws or stones can cause extensive damage.
- Use only the recommended quantities of fabric conditioner.
- Do not machine wash fabrics which are saturated with petroleum products. If volatile cleaning fluids have been used, make sure that they are thoroughly removed from the fabric before it is placed in the appliance.
- Leave the porthole door slightly ajar between washes to preserve the door seal.
- Before you open the door of the machine check that the water has drained. Do not open the door if you can still see water.

## SERVICE/REPAIR

- You should not attempt to repair the machine yourself. Repairs carried out by inexperienced or unqualified persons may cause injury and/or more serious faults to the machine.
- This product should be serviced by an authorised Service Centre only, and only genuine spare parts should be used.

## GENERAL SAFETY

- It is dangerous to modify the specifications of this appliance in any way.
- This appliance is designed to be used by adults. Children should not be allowed to touch the controls or play with the product.
- Pets and small children may climb into washing machines. Check your appliance each time before use.
- The glass door becomes very hot during washing cycle. Keep children away from the appliance while it is in use.
- When disposing of your old washing machine, the electric cable must be cut off and the door catch must be made unusable.

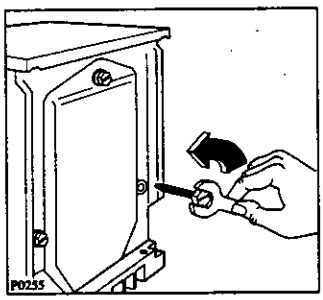
# INSTALLATION

## Unpacking

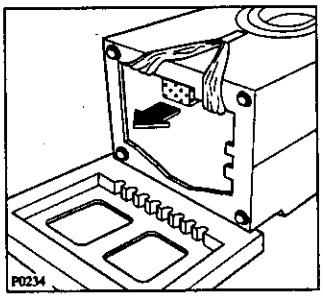
All transit bolts and packing must be removed before using the machine.

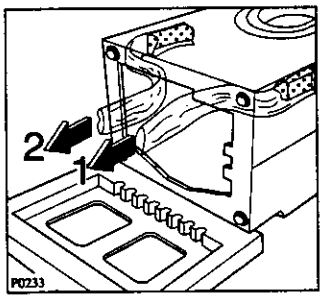
You are advised to keep all packing for re-use in case you move house and the machine has to be transported again.

Proceed as follows:




Using a spanner remove the screw on the right at the rear of the machine.
Carefully lay the machine on its back making sure that the hoses are not squashed.
Place one of the polystyrene angle packings between the machine and bottom.

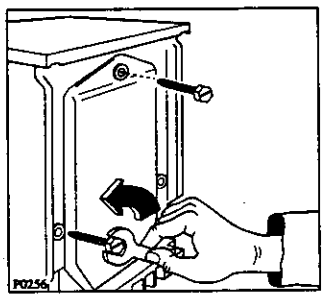


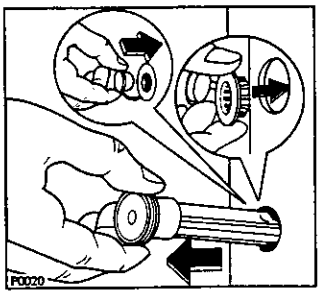




Remove the polystyrene block from underneath the machine.

Release the two polythene bags by removing the adhesive strip.

Carefully remove the right polythene bag (1) by pulling it towards the centre of the machine. Repeat the operation for the left polythene bag (2).




Set the machine upright and unscrew the two remaining rear screws.

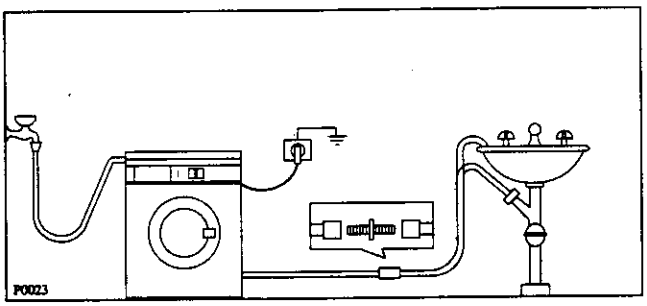
Slide out the 3 plastic spacers and plug the 3 holes with the 3 plastic plugs which you can find on the back of the machine.

## Positioning

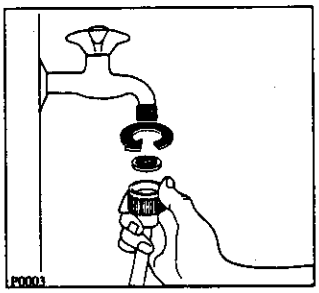
Position the machine on a firm level surface.

The machine must not touch the wall or other furniture.

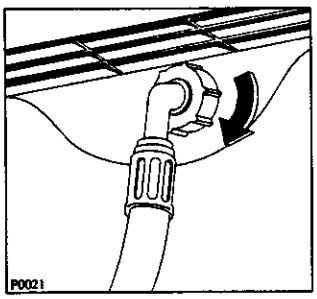
It is assumed that the tap, drainage point and socket are within easy reach of the machine hoses and power supply cable. If not, you are advised to call your fitter in order to move the tap and/or drainage point and/or socket.




## Water inlet




Connect the water inlet hose to a tap with a 3/4" gas thread spout after fitting the filter supplied with the machine.



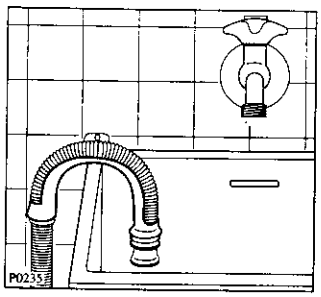

The other end of the inlet hose connected to the machine can be turned in any direction. Simply loosen the fitting, rotate the hose and retighten.

The inlet hose must not be extended. If it is too short and you do not wish to move the tap, replace it completely with a longer high pressure hose specifically designed to solve problems of this type.

## Water drainage

The end of the drain hose can be positioned in three ways:

**Over the edge of a basin** at a height of between 60 and 90 cm.



To keep the drain hose spout bent, use the special plastic hose guide supplied with the machine. Secure it to the wall with a hook, for example, or to the tap by means of a piece of string, to prevent the drain hose moving during rinsing cycle thus causing floods.

**In a basin drainpipe branch:** the branch must be above the basin siphon so that the end of the hose is at least 60 cm from ground level.

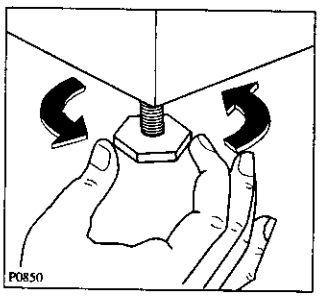
**Directly in a drainpipe:** you are advised to use a vertical 65 cm high pipe; in any case it should never be shorter than 60 cm or longer than 90 cm.

The end part of the drain hose must always be ventilated, i.e. the internal diameter of the pipe must be wider than the external diameter of the drain hose.

The drain hose can be extended up to a maximum length of 180 cm. Use an extension with an internal diameter at least equal to the diameter of the original hose and a suitable fitting. The hose extension will run along the floor and only the part near the drainage point will be raised.

## Levelling

Position the appliance and level it by tightening or loosening one or two of the adjustable feet which are self-locking. Ensure that the machine is resting securely with all four feet on the ground.



## Electrical connection

Before plugging the appliance into the wall socket, make sure that:

**1.** the mains voltage corresponds to the voltage given in the technical specifications;

**2.** the meter, fuses, mains power supply and wall socket can all take the maximum load required.

Make sure that the socket and plug are compatible without having to use any type of adapter. If necessary, have the domestic wiring system socket replaced.

The electric cable must not be extended. If it is too short and you do not wish to move the socket, replace it completely with a longer cable.

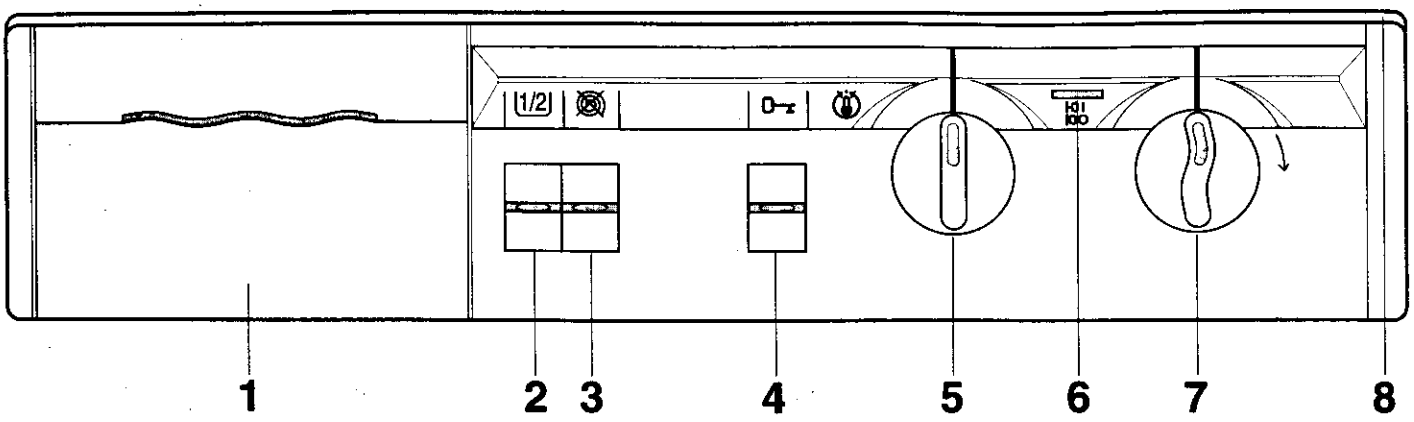
**Safety standards require the appliance to be earthed.**

**The Manufacturer accepts no liability for failure to observe the above safety precautions.**

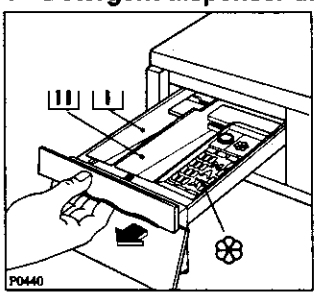
ENGLISH

# USE

## Control panel




### 1 Detergent dispenser drawer




**Symbols**

- Prewash
- Wash
- Fabric softener

### 2 Half load button 1/2

Select this button to reduce water consumption on the rinse cycle when washing a smaller load of cottons or linens. (Maximum load size = 2.5 kg).

The machine will carry out 3 rinses instead of 4.

### 3 No spin button

Depress this button when you have to wash particularly delicate cotton or linen items in order to exclude all the spinning phases.

### 4 Door opening button

Depress this button to open the door.

### 5 Temperature selector dial (thermostat)

To select the washing temperature turn the dial to the required value.

When your laundry is only lightly soiled, a cold wash can be used (dial to position ✳ ).

### 6 Mains-on light

It comes on when the machine starts operating and goes out at the end of the programme.

### 7 Programme selector dial and on/off button

To select the required washing programme turn the dial **clockwise.**

To start the programme, pull the dial outwards, to swith off the machine, push the dial inwards.

### 8 Programme chart

## Washing hints

You are advised not to leave your laundry too long, especially when damp. Damp laundry produces mould and unpleasant smells.
Mould stains cannot be removed.

## Sort your laundry

Study carefully the chart in this booklet explaining the symbols used on clothes labels.
The following points are particularly important:

- a **line** under the bowl means that the garment cannot be washed using programmes for resistant fabrics such as cotton and linen;
- do not mix coloured garments with whites;
- anticrease materials like polyester/cotton should be treated as synthetics;
- non-resistant fabrics like acrylic and most curtain materials should be treated as delicate fabrics;
- the wool programme is designed specifically for pure new wool. Other types of wool and wool mixtures may shrink or felt if machine-washed.

  Woollen garments should be spun briefly immediately after washing.

## Pre-wash

Pre-wash is not normally necessary. Your new washing machine combined with modern detergents will give perfect washing results without pre-wash, thus saving energy, time, water and detergent.
However, when the laundry is particularly dirty (for example if you have to wash mechanics' overalls or butchers' aprons), you are advised to use prewash with a biological detergent.

## Temperatures

We suggest that white cotton and linen, if it is not excessively soiled, can be washed at 60° instead of 90°. There should be no reduction in performance, but there will be an energy saving of approximately 30%.

The same applies to a lesser extent to fast coloured garments.
They usually require a temperature of 60° but if they are not excessively dirty, you will have satisfactory results at 40°.

Garments with non-fast colours should not be washed at temperatures above 40°. If fast and non-fast colours are washed together, they should be treated as non-fast colours and therefore the temperature should not exceed 40°.

Resistant white and coloured synthetics can normally be washed at 60° but also in this case 40° is sufficient if the laundry is not excessively dirty.

Delicate synthetics, synthetics with non-fast colours and woollen garments must never be washed above 40°. If only one of the labels specifies 30°, this temperature must be selected for the whole wash.

## How much laundry can be washed in one load?

For cotton and linen items as well as for synthetics and wool refer to the quantities indicated on the programme charts.
Strictly speaking you should always weigh your laundry.

As weighing can be complicated, we suggest you estimate the weight according to how full the drum is:

**cotton and linen:** drum full but not too tightly packed

**resistant synthetics:** no more than ½ of the drum

**delicate fabrics and wool:** no more than ⅓ of the drum.

**Before placing the laundry in the machine:**

mend all tears, holes and ladders;

secure loose buttons and close poppers and zips;

do not wash frayed garments - mend hems before washing;

remove all small objects from pockets. Nails, pins, clips and similar objects can seriously damage your washing machine and laundry;

remove curtain hooks;

wash coloured garments and in particular those with non-fast colours separately when washing for the first time. They are likely to lose colour the first time they are washed;

treat obstinate stains such as grass, rust, tar, paint, ink etc. with a stain remover before washing.

To remove paint stains, for example, use a volatile substance such as turpentine: in this case, you should wait for it to dry completely before washing.
The manufacturer of the appliance is not responsible for any damage deriving from the use of volatile, inflammable or toxic substances.

## Detergents and additives

Good washing results also depend on the choice of detergent and use of the correct quantities to avoid waste and protect the environment.
Although biodegradable, detergents contain substances which in large quantities can damage the delicate ecological balance of nature.

**Always use good quality detergents suitable for use in washing machines.**

Follow the indications given by the detergent manufacturer according to the weight of laundry, the degree of soil and the hardness of the water in your area; if you do not know how hard it is, ask your local Water Authority.

### Powder detergents

The washing powder should be placed in the appropriate compartments of the dispenser drawer before starting the programme.
Special detergents are available for coloured and delicate fabrics and for wool.

### «Concentrated» powder detergents

Pour the concentrated powder detergent into the compartment for the main wash.

The washing machine incorporates a recirculation system which allows an optimal use of the concentrated detergent.

**Avoid selecting programmes including prewash when concentrated detergents are used.**

**Avoid use of the proportioners supplied with the detergents into the internal drum.**

### Degrees of water hardness

| Level | Characteristic | German degrees | French degrees |
|---|---|---|---|
| 1 | soft | 0-7 | 0-15 |
| 2 | medium | 8-14 | 16-25 |
| 3 | hard | 15-21 | 26-37 |
| 4 | very hard | > 21 | > 37 |

### Liquid detergents

A liquid detergent can be used in the middle compartment of the dispenser drawer as long as you start the machine up straight away without prewash.

### Liquid additives

It may be advisable to use a liquid fabric softener when you are going to dry synthetic garments in the tumble dryer for example.
This prevents the fabrics becoming charged with static electricity.

## Wash code symbols

These symbols appear on fabric labels, in order to help you choose the best way to treat your laundry.

| | | | | | | |
|---|---|---|---|---|---|---|
| **Strong wash**<br> <br>**Delicate wash**<br> | <br>Max. wash temperature 95°C<br> | <br>Max. wash temperature 60°C<br> | <br>Max. wash temperature 40°C<br> | <br>Max. wash temperature 30°C<br> | <br>Hand wash | <br>Do not wash at all |

| | | | | |
|---|---|---|---|---|
| <br>**Bleaching** | <br>Bleach in cold water | <br>Do not bleach | | |

| | | | | | |
|---|---|---|---|---|---|
| <br>**Ironing** | <br>Hot iron max 200°C | <br>Warm iron max 150°C | <br>Lukewarm iron max 110°C | <br>Do not iron | |

| | | | | | |
|---|---|---|---|---|---|
| <br>**Dry cleaning** | <br>Dry cleaning in all solvents | <br>Dry cleaning in perchlorethylene, petrol, pure alcohol, R 111 & R 113 | <br>Dry cleaning in petrol, pure alcohol and R 113 | <br>Do not dry clean | |

| | | | | | |
|---|---|---|---|---|---|
| <br>**Drying** | <br>Flat | <br>On the line | <br>On clothes hanger | <br>high temperature<br>low temperature<br>Tumble dry | <br>Do not tumble dry |

## ENERGETIC PROGRAMMES FOR COTTON AND LINEN

**Maximum load:** 5 **kg**

| Progr. | Temp. | Type of laundry | Cycle description | Possible options |
|---|---|---|---|---|
| **A** | **60°-90°** | Whites<br>with prewash<br>(heavy soiled) | Prewash<br>Wash at 60°-90°C<br>Rinses<br>Spin | 1/2 |
| **A** | **40°-<br>60° E** | Whites economy (*)<br>with prewash<br>(light soiled) | Prewash<br>Wash at 40°-60°C<br>Rinses<br>Spin | 1/2 |
| **B** | **60°-90°** | Whites<br>without prewash<br>(normally soiled) | Wash at 60°-90°C<br>Rinses<br>Spin | 1/2 |
| **B** | **40°-<br>60° E** | Whites economy (*)<br>without prewash<br>(light soiled) | Wash at 40°-60°C<br>Rinses<br>Spin | 1/2 |
| **B** | **40°-60°** | Fast<br>coloureds<br>(normally soiled) | Wash at 40°-60°C<br>Rinses<br>Spin | 1/2 |
| **C** | **30°-40°** | Non fast<br>coloureds<br>(normally soiled) | Wash at 30°-40°C<br>Rinses<br>Spin | 1/2 |
| **D** | | Rinses | Rinses with liquid<br>additives, if required<br>Spin | |
| **F** | | Short spin | Drain and short spin | |

60°-90° means that you can choose 60° or 90° or an intermediate temperature, according to the type of fabric. Is the same for the other temperatures fields.

(*) For an economical wash you can select 60° instead of 90° or 40° instead of 60°, the wash time will not alter and you will save energy.

## GENTLE PROGRAMMES FOR SYNTHETICS, MIXED FIBRES, DELICATES AND WOOLLENS

**Maximum load: 2 kg, woollens: 1 kg**

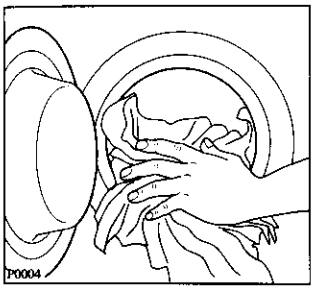
| Progr. | Temp. | Type of laundry | Cycle description | Possible options |
|---|---|---|---|---|
| **G** | **40°-60°** | Synthetics with prewash (heavy soiled) | Prewash<br>Wash at 40°-60°C<br>Rinses<br>Stop with water in tub | |
| **G** | **30°-40° E** | Synthetics economy (*) with prewash (light soiled) | Prewash<br>Wash at 30°-40°C<br>Rinses<br>Stop with water in tub | |
| **H** | **40°-60°** | Synthetics without prewash (heavy soiled) | Wash at 40°-60°C<br>Rinses<br>Stop with water in tub | |
| **H** | **30°-40° E** | Synthetics economy (*) without prewash (light soiled) | Wash at 30°-40°C<br>Rinses<br>Stop with water in tub | |
| **J** | **30°-40°** | Delicates | Wash at 30°-40°C<br>Rinses<br>Stop with water in tub | |
| **K** | **40°** | Woollens | Wash at 40°C<br>Rinses<br>Stop with water in tub | |
| **L** | | Rinses | Rinses with fabric softener<br>Stop with water in tub | |
| **M** | | Drain | | |

**Important!** At the end of the last rinse, the washing machine stops without draining the water so that the garments do not crease. To drain the water, select programme **F** (short spin) or **M** (draining).

(*) For an economical wash you can select 40° instead of 60° or 30° instead of 40°, the wash time will not alter and you will save energy.

## Operating sequence

### 1. Place the laundry in the drum

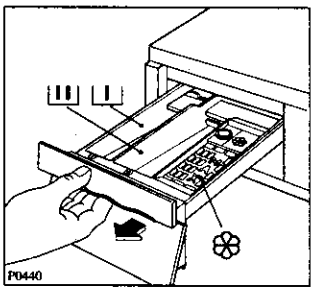


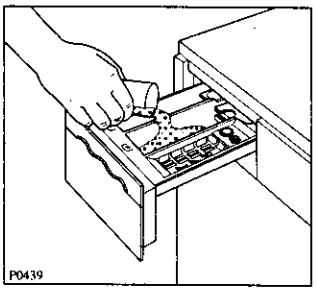

Open the external door by pressing the relevant button.

Place the garments to be washed inside the drum one by one laying them as flat as possible. Close the door ensuring that the catch clicks into place.

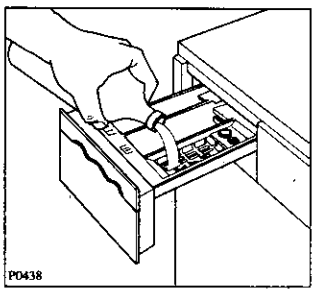
### 2. Measure out the detergent into the dispenser drawer

Pull out the detergent dispenser drawer from the control panel.
Pour the detergent into the main wash compartment. Follow the detergent manufacturer's guidelines for the amount required.
If you wish to carry out a prewash, pour the amount of detergent required into the «prewash» compartment.



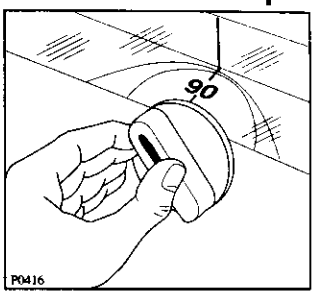

### 3. Add the liquid additives if required.




Pour the softener, if required, into the compartment marked ❀.
Do not exceed the MAX level.

### 4. Depress the required button(s).

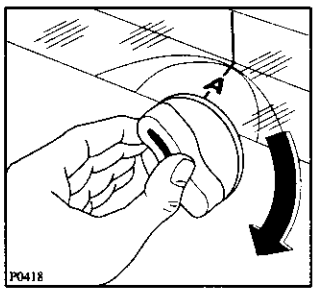
### 5. Select the temperature



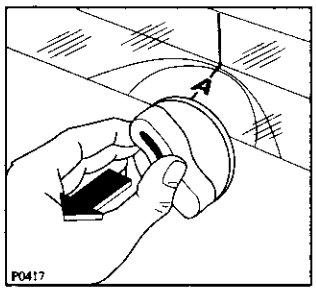

Turn the temperature selector dial to the required value.

### 6. Select the required programme and start the machine

Plug into the mains.
Turn on the water tap.
Check that the drain hose is correctly positioned.




Turn the programme selector dial **clockwise** until the programme coincides with the marker.




Pull the dial outwards: the «mains on» light will illuminate and the machine starts operating.

### 7. At the end of the programme

The appliance stops automatically and the mains-on light goes out.

If you have selected a delicate programme, drain the water before opening door.

**Wait one or two minutes before opening the door** to give the electric locking mechanism time to release it.

Depress the programme selector dial to switch the machine off.

Release the button(s).

Turn the water tap off and unplug the machine from the mains.

Open the loading door and remove the laundry. Ensure that the drum is completely empty by turning it with one hand.

Leave the door ajar for a while to eliminate the steam.

# MAINTENANCE



## Bodywork

The outside of the machine can be cleaned with warm water and a neutral non-abrasive household detergent. Wipe with clean water and dry after cleaning.

**Important:** do not use methylated spirit, diluents or similar products.

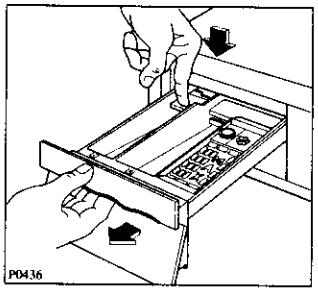
## Detergent dispenser drawer

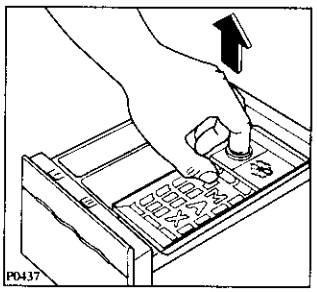
After a while detergents and fabric softeners leave a deposit in the drawer.

It should be cleaned from time to time with a jet of running water.

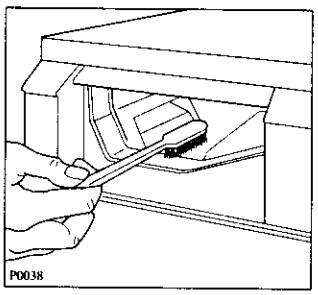
If necessary it can be removed completely from the machine by pulling it out after depressing the button at the rear of the drawer.

To facilitate cleaning, the upper part of the additive compartments can be removed.




## The drawer recess



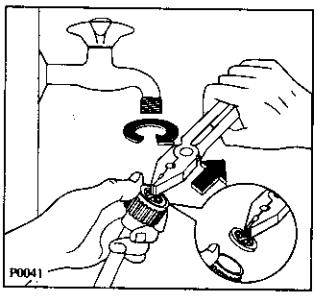

Detergent can also accumulate inside the recess which should be cleaned occasionally with an old toothbrush.

Once you have finished cleaning, replace the drawer and run a rinse cycle without laundry.

## The drain pump

The machine is equipped with a self-cleaning pump, therefore a drain filter has not been designed for this appliance.

## The water inlet filter




If your water is very hard or contains traces of lime deposit, the water inlet filter may become clogged.

It is therefore a good idea to clean it from time to time.

Turn off the water tap.

Unscrew the water inlet hose.

Remove and clean the filter using a hard bristle brush.

Replace the filter and tighten up the inlet hose.

# SOMETHING NOT WORKING?

## If the machine does not start up:

- check that the door is firmly shut;
- check that the appliance is plugged in
- check that the mains fuse is intact;
- check that the programme selector dial is correctly positioned and pull out.

## If the machine does not fill:

- is the tap on?
- is water coming out of the tap? Check.
- is the inlet hose squashed or bent?
- is the filter of the inlet hose clogged?
- is the loading door open?

## If the machine empties as it fills:

- the end of the drain hose is too low.

## If the machine does not drain and/or does not spin:

- is the drain hose squashed or bent?
- Have you selected a «gentle programme»?
- Have you depressed the ⊗ button?

## If there is water on the floor:

- too much detergent or unsuitable detergent? The formation of foam can cause water leaks.
- is one of the joints or the tap leaking? It is not always easy to see as the leak often runs along the hose.

## If the machine vibrates or is too noisy:

- have all the transit bolts and packing been removed?
- is the machine touching something?
- are all the feet resting firmly on the ground?

If you are unable to identify or solve the problem, consult our servicing department. Before telephoning, make a note of the make, model and date of purchase of your machine: the Service Department will require this information.